

**(19) World Intellectual Property
Organization
International Bureau**



(43) International Publication Date
23 June 2005 (23.06.2005)

PCT

(10) International Publication Number
WO 2005/056664 A1

- (51) **International Patent Classification⁷:** C08L 13/00, 15/02, 7/00, C08J 3/24, B60C 1/00

(21) **International Application Number:** PCT/CA2004/002104

(22) **International Filing Date:** 10 December 2004 (10.12.2004)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:** 2,452,910 12 December 2003 (12.12.2003) CA

(71) **Applicant (for all designated States except US):** LANXESS INC. [CA/CA]; P.O BOX 3001, 1265 VIDAL STREET SOUTH, SARNIA, ONTARIO N7T7M2 (CA).

(72) **Inventors; and**

(75) **Inventors/Applicants (for US only):** KULBABA, Kevin [CA/CA]; 348 BRADFORD DRIVE, SARNIA, ONTARIO N7S 4H7 (CA). RESENDES, Rui [CA/CA]; 338 BRENTWOOD CRES., CORUNNA, ONTARIO N0N 1G0 (CA). VON HELLENS, Carl Walter [US/CA]; P.O. BOX 484, 1953 WINSLOW CRESCENT, BRIGHT'S GROVE, ONTARIO N0N 1C0 (CA).

(74) **Agent:** ANISSIMOFF & ASSOCIATES; SUITE 201, 235 NORTH CENTRE ROAD, LONDON, ONTARIO N5X4E7 (CA).

(81) **Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 - with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BUTYL RUBBER COMPOSITION FOR TIRE TREADS

(57) Abstract: The present invention relates to a method of improving the hardness and abrasion resistance while maintaining the useful dynamic properties inherent to butyl based tire tread compounds by adding HXNBR to a rubber composition comprising at least one butyl elastomer for a tire tread, in particular a tire tread suitable for a pneumatic tire.



WO 2005/056664 A1

STANDARD COPY